

II. Remarks

Reconsideration of the application in view of the above amendments and following remarks is respectfully requested. Claims 1, 3-14 and 17-20 are pending. No new matter has been added by the present amendment.

A. Allowance of Corresponding Foreign Applications

Applicants note that foreign applications corresponding to the present application have been allowed with substantially similar claims, and in view of consideration of the Ezura reference in those cases, in Europe, China and India. Copies of the correspondence from the foreign patenting authorities and indicating allowance of the applications being concurrently submitted via an Information Disclosure Statement.

B. Objection to Drawings & Rejection of Claims 8-14 under § 112 (2nd paragraph)

The drawings of Figs. 3 and 4 were objected to by the examiner on the basis that these drawings do not illustrate the article and leakage path recited in claims 8. Claims 8-14 were rejected on the basis that it was unclear how the claimed features could be combined with the features of claim 1; particularly since claim 1 describes a different embodiment of the invention that does not seem compatible with the features described in claims 8-14.

Claim 1 has been amended to delete features of the claim believed to make it readable only on Figs. 5-7. Those features are now presented in new claim 18. As now presented, claim 1 is believed to be generic to all embodiments of the application.

It is respectfully submitted that claims 8-14 do not solely apply to the embodiment of Figs. 1-4, but that these claims also apply to the embodiments of Figs. 5-7. The fundamental difference between the embodiments of Figs. 1-3 and Figs. 5-7 is the construction of the base part 24 of the housing 2. In Figs. 1-3, this construction is of a one piece design. In Figs. 5-7, the construction is of a two piece design. The fundamental difference is not the creation of a leakage path. The leakage path is created in all of the embodiments.

First of all, it must be noted that the connector piece 8 seen in Fig. 4 is used both with the embodiment of Figs. 1-3 and with the embodiments of Figs. 5-7. In other words, the plug-in part 6 of the connector piece 8 is received into the plug connector 1 in the same manner in all of the embodiments. The original specification sets this out both implicitly and explicitly. Paragraph [0013] states that the plug connector 1 of Fig. 5 is shown without the connector piece 8; thereby implying its use of the connector piece 8 therewith. Paragraph [0017], in its first sentence, explicitly states that:

In all of the exemplary embodiments, a plug connector 1 comprises a housing part 2 with (at least) one plug socket 4 (see in particular Figs. 5 to 7) for the axial, fluid-tight insertion of a tubular plug-in part 6 (see in this regard the separate illustration in Fig. 4).

As one of ordinary skill in the art will appreciate, it is clear that the plug connector 1 of Fig. 4 is to be used with the embodiments of Figs. 5-7. Showing them separately at some point in the application, as is done in Fig. 4-7, allows for the various features of each component to be more easily seen and readily understood.

Since the connector piece 8 is used with the plug connector 1 of Figs. 5-7, the features of the plug-n part 6 come in to play and operate in the same manner as they do in Figs. 1-3. As noted in the description, the plug-in part 6 includes depressions 40 that are specifically located relative to the seals 10 and 16, when the connector piece 8 is

initially locked with the plug connector 1, but not fully sealed. As such, these depressions 40 help to define the leakage path, which proceeds inwardly about the seals 10 and 16 and allow the fluid to exit between the dirt seal 10 and the outer surface of the plug-in part 6. Notably, part of this pathway must flow between the interface of the cylindrical sealing region 42 of the plug-in part 6 and the inner cylindrical surface of the insert part 28. This interface, while shown as being surface to surface, clearly must not and cannot be fluid tight/sealed merely by the nature of the surface to surface interface. This understanding of non-sealed interfaces would therefore also apply to other surface to surface interfaces in the embodiments. It is submitted that one of ordinary skill in the art would understand that the embodiments must operate as such since a particular source or entry point for leaking fluid into the leakage path is itself not specifically defined.

It is readily apparent that there are two possible entry points for fluid into the leakage path. One entry point is between the radial interface of the end flange (un-numbered) of the sleeve 22 and the base part 24 (seen in Figs. 1-3). Another point of entry for the fluid into the leakage path is between the outer surface of the sleeve 22 and the inner surface of the plug-in part 6. Notably, no seal provided or mentioned as being created in either of these areas. While the former point of entry for fluid exists only in the embodiment of Figs. 1-3, the latter point of entry for the fluid exists in all of the embodiments. To aid with the above, Attachment A to this response is a modified version of Fig. 6, showing a plug-in part 6 of a connector piece 8 located within the plug connector 1 and illustrating the entry path that would result with this construction. The plug-in part is shown as being in an initially locked, but not sealed, position.

It is also respectfully submitted that one of ordinary skill in the art would understand that a feature described in connection with one embodiment would be readily applicable across all of the embodiments and need not be shown in each and every embodiment. This is readily evident in the present application since the discussion progresses with a series of features, and references to these features jumps back and forth between the various embodiments, often times referring to multiple embodiments and figures within a single paragraph.

One paragraph in particular exemplifies this understanding of the application intending various features to be applicable to all of the embodiments. This paragraph is paragraph [0025].

The paragraphs preceding paragraph [0025] discuss the various features including the insertion of the plug-in part 6 into the plug connector 1, the snap fit connection 26 between the insert part 28 and the base part 24, and other features. Reference in those preceding paragraphs is made all three of the embodiments, but most often reference is made to the two embodiments of Figs. 6 and 7. Paragraph [0025] starts out in its wording as "owing to the described configuration and arrangement..." and finishes with the statement that a leakage path is formed and indicated by arrows 36, which are seen in Fig. 2. Thus, reference is made to constructions in all the embodiments as allowing for the formation of the leakage path. This shows that the leakage path is applicable across all embodiments and implies that other features, such as the snap fit connection between the insert and the base parts, are as well.

One additional reason why the discussion of the leakage path would rely heavily on Figs. 1-3 is that the presence of the leakage path is dependent on the position of the

plug-in part 6 within the plug connector 1. Figs. 1-3 progressively show the insertion of the plug-in part, with Fig. 1 showing the initially locked position, Fig. 2 showing air leakage and Fig. 3 showing the fully sealed position.

Accordingly, it is submitted that claim 1 is generic to all of the embodiments and that claim 8 also applies to all of the embodiments of the invention. Applicants respectfully request that these rejections be withdrawn.

C. *Rejections of Claims under § 103(a)*

Claims 1, 3 and 5-7, were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ezura (U.S. Patent Publication No. 2003/0178846), and in further view of Kooten (U.S. Patent No. 5,403,046). Claim 4 was rejected as being unpatentable over Ezura in view of Kooten, as applied to claims 1, 3, and 5-7 above, and further in view of Hosono et al (US 6,447,019). Applicants respectfully traverse this rejection.

Claim 1 of the present application recites that the insert part is directly connected to the base part by a snap fit connection between the insert part and the base part. Claim 20 further defines this connection as being releasable.

In Ezura, the examiner refers to the release bush 58 as being analogous to the claimed insert part and as being connected to the base part. In reviewing Ezura, however, it is seen that the release bush 58 is not itself directly connected with the housing part 12. Rather, annular projection 50, which the examiner indicated as creating the connection, is formed on the outer perimeter of a cylindrical guide 48. Thus, the projection 50 is not part of the release bush 58 and the release bush 58 is not directly connected to the housing 12 as required by claim 1. As set out in claim 20, the insert

part is releasably engaged with the base part. This is formed by the latch openings 34 and exposure of the lug-like latching element 32 therein. In Ezura, the projection 50 is never mentioned as being releasable and is intended to be permanently attached.

Additionally and alternatively, the release bush 58 not analogous to the insert part of claim 1 since it performs an opposite function from that of the insert part. The release bush 58 of Ezura operated to enable the plug-in part 6 to be removed from the plug connector 1. By advancing the release bush 58 into the housing part 12 of Ezura, the end 54 of the holding element 52 is caused to disengage from Ezura's plug-in part 36, thereby allowing the plug-in part to be removed. In the present application, interaction of the holding element 14 with the inner cone 18 of the insert part 28 causes further engagement of the holding element 14 with the plug-in part 6. This is presented in new claim 17.

New claim 19 recites the formation of the leakage path in a hold position of the plug connector and the plug-in part and a sealing of the leakage path in a sealed position of the plug connector and the plug-in part. This is not disclosed in Ezura as well.

The Office Action explicitly states that Ezura fails to disclose a means for securing against relative rotation between said receiving part and said joining part. This feature of the invention is seen in Figs. 3 and 7. In this regard, the Office Action relies on Kooten for teaching a coupling having a means for securing against relative rotation provided between said receiving part and said joining part. As noted from the prior discussion, Ezura lack various other features that are recited in claim 1. Lacking those claimed features, the proposed combination of Ezura and Kooten still lacks recited claim features.

In view of the above, it is submitted that claim 1 is patentable over the combination of Ezura and Kooten.

Claims 3-4 and 5-7, depend from claim 1, and incorporate all of the limitations of claim 1. Accordingly, it must be concluded that claims 3, 4 and 5-7 are also not obvious in view of Ezura and Kooten for at least the same reasons as claim 1. Claims 8-14 and 17-20, which were not rejected based on the references, further depend from claim 1. Allowance of all of the pending claims is requested.

D. *Conclusion*

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are now in condition for allowance.

Respectfully submitted,

/Eric J. Sosenko/
Eric J. Sosenko, Reg. No. 34,440
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
524 S. MAIN STREET
SUITE 200
ANN ARBOR, MI 48104
(734) 302-6010